

**Maintenance and Operation of the San Juan River Basin Hydrology Model
San Juan River Basin Recovery Implementation Program - Hydrology Committee
Fiscal Year 2003 Project Proposal**

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Background:

The model will be made available to generate and analyze runs associated with Section 7 Consultations and/or special requests from the Biology or Coordination Committees related to the flow recommendations or other hydrological aspects of the Program. In order for the model to be available for such requests, the model and data must be maintained to adjust configurations, correct for errors, and evolve the data set forward through time. Additionally, Reclamation will coordinate and manage the hydrology-related tasks performed by the Hydrology Committee, including administering cooperative agreements and contracts with consultants, accounting for expenditures, developing and providing status reports, and coordinating work items to ensure work is completed as planned. Because the 3rd Generation model revision won't be completed until mid-FY2003, the estimated staff days and budget assume that only ½ of the fiscal year will be available for this work.

Study Area:

San Juan River Basin

Objectives:

1. Maintain data to evolve the data set forward through time.
2. Maintain the model to adjust model configuration, methodologies, data, or assumptions.
3. Provide hardware and software support.
4. Implement Riverware upgrades and receive technical support.
5. Generate and analyze model runs associated with Section 7 consultations or special requests from the Biology and/or Coordination Committees.
6. Coordinate and manage the hydrology-related tasks performed by the Hydrology Committee, including administering cooperative agreements and contracts with consultants, accounting for expenditures, developing and providing status reports, and coordinating work items to ensure work is completed as planned.

Products:

1. Hydrological analysis of water development scenarios or other scenarios as requested by stakeholders or Program committees.
2. Monthly status reports showing work completed and funds expended will be provided to the Hydrology Committee. A report addressing the status of the model and documenting changes to it will be prepared and submitted to the Coordination Committee. Another report documenting hydrological conditions and Navajo Dam operations, and updating hydrological statistics for water year 2002 will also be prepared and submitted to the Coordination Committee.

Budget FY-2003:

Objective	Staff days	Labor	Travel	Equipment and supplies
Objective 1				
Personnel	7	5,000		
Travel				
Equipment and supplies				
Objective 2				
Personnel	7	5,000		
Travel				
Equipment and supplies				
Objective 3				
Personnel	3	2,000		
Travel				
Equipment and supplies				
Objective 4				
Personnel				
Travel				
Equipment and supplies				2,500
Objective 5				
Personnel ¹	85	47,000		
Travel - 2 trips at \$500 per trip			1,000	
Equipment and supplies				
Subtotal (technical work)				62,500
Objective 6				
Personnel	24	15,000		
Travel				
Equipment and supplies				
Sub-total (coordination)				15,000
Total				\$77,500

¹ Personnel time for model operation (Objective 5) includes 20 staff days for USBR Denver and 65 staff days (1/4 FTE) for USBR Western Colorado Area Office hydrologist/modeler. The staff days for the Western Colorado Area Office assumes a new employee would be involved in becoming familiar with the model and attending training. These staff days could be reduced if the work is completed by existing staff member who is familiar with the model.

Estimated Outyear Funding (Based on 5% allowance for inflation)

(Note: Outyear budget could be increased if additional hydrological Program duties are identified and assigned to the Reclamation modeler. The Hydrology Committee encourages Reclamation to staff this person in the Durango office.)

Fiscal Year 2004*	\$110,250
Fiscal Year 2005**	\$82,700
Fiscal Year 2006	\$86,800
Fiscal Year 2007	\$91,100

* FY2004 Budget includes model operation and maintenance work for entire year (not ½ year like FY2003) and assumes “new” hydrologist/modeler would still be in the learning process. Budget could be reduced if the work is completed by existing staff member who is familiar with the model.

**FY2005 Budget assumes no USBR Denver involvement and only one hydrologist/modeler is involved in the model operation and maintenance.